

In the Specification:

Please replace the paragraph beginning on page 2, line 6 with the following amended paragraph:

In the conventional magnetic head tester, as described above, the magnetic head suspension assembly is set in the tester. Therefore, if the magnetic head tested is judged to be a bad product according to the results of the tests, the whole magnetic head suspension assembly will be discarded. High quality magnetic heads are required with increasing capacity of media, thus higher technology for manufacturing high quality magnetic heads is required, but manufacturing yield is reduced. Magnetic head suspension assemblies are often discarded due to bad characteristics of sliders.

Please replace the paragraph beginning on page 2, line 14 with the following amended paragraph:

Function- The function of the suspension of the magnetic head suspension assembly is made higher with increasing capacity of media, so the suspension has high additional value. Therefore, by discarding the whole magnetic head suspension assembly which has been judged to be a bad product by the tests, the costs of making the suspension and assembling the slider on the suspension come to nothing, namely nothing. Namely, it causes an economical problem.

Please replace the paragraph beginning on page 2, line 20 with the following amended paragraph:

In the conventional magnetic head tester in which the magnetic head suspension assembly is set, the characteristics of the product is- product are influenced by variations of qualities of the suspension, e.g., elasticity, a roll angle and a pitch angle of a gimbal section supporting the slider, and factors of mounting the slider onto the suspension. Namely, if the characteristics of the product is- product are varied by variation of the elasticity of the suspension, etc., prescribed electromagnetic transduction characteristics cannot be gained, so that the product is judged to be a bad product. In this case, an inspector cannot clearly know whether the magnetic head suspension assembly is judged as a bad product due to characteristics of the magnetic head or not.

Please replace the paragraph beginning on page 3, line 1 with the following amended paragraph:

Thus, the present invention was invented to solve the above described problems, and an object of the present invention is to provide a magnetic head tester capable of correctly judging characteristics of magnetic heads, executing the tests correctly, preventing loss of manufacturing and assembling parts, etc, which are caused by discarding good suspensions, and reducing manufacturing costs.

Please replace the paragraph beginning on page 3, line 8 with the following amended paragraph:

To achieve the object, the present invention has the following structures.

Please replace the paragraph beginning on page 4, line 12 with the following amended paragraph:

Fig. 1 is an explanation view showing a whole structure of a magnetic head tester; Figs. 2A and 2B are a plane view and a sectional view of a holder; Fig. 3 is an explanation view showing a method for attaching the holder to a slider; Fig. 4 is a sectional view of the holder inclinably holding the slider; Fig. 5 is a sectional view of a base plate supported by a coil spring; Fig. 6 is a sectional view of another base plate supported by coil springs; Fig. 7 is a sectional view of the base plate supported by a leaf spring; Fig. 8 is a sectional view of the base plate supported by a cushion; Fig. 9 is a sectional view of the base plate supported by a liquid; Fig. 10 is a sectional view of a hemispheric base supporting the slider; Fig. 11 is a sectional view of another hemispheric base supporting the slider; Fig. 12 is a perspective view of the magnetic head suspension assembly; and Fig. 13 is a perspective view of the slider.

Please replace the paragraph beginning on page 5, line 7 with the following amended paragraph:

The holder 20 is formed into a columnar shape and suspended in an accommodating hole 22a, which is formed in an upper part of the holder base 22 and whose planar shape is a circular shape, by a leaf spring 24, which is spanned between an outer edge of the holder 20 and an inner edge of the accommodating hole 22a. An inner diameter and a depth of the accommodating hole 22a are greater than an outer diameter and a height of the holder 20; enough spaces are formed between an outer circumferential face and a bottom face of the holder 20 and an inner circumferential face and an inner bottom face of the accommodating hole 22a. Sizes of the holder 20 and the accommodating hole 22a are designed to allow the holder to incline in the accommodating hole 22a in any ~~directions~~
direction.

Please replace the paragraph beginning on page 5, line 18 with the following amended paragraph:

As shown in Fig. 2B, a loose hole 20a is formed in the bottom face of the holder 20 and extended in an axial direction of the holder 20. A symbol 28 stands for a supporting pin held by the holder base 22, and an upper part of the supporting pin 28 enters the loose hole 20a. An upper end of the supporting pin 28 is formed into a sharp conical shape, and the sharp end of the supporting pin 28 contacts an inner bottom face (a ceiling

face) of the loose hole 20a. Since the upper end of the supporting pin 28 is a sharp end, the supporting pin 28 is capable of supporting the holder at a point and the holder 20 is capable of inclining in any ~~directions~~ direction. Further, ~~an enough~~ enough space is formed between the outer circumferential face of the supporting pin 28 and the inner circumferential face of the loose hole 20a, so that the supporting pin 28, which is inserted in the loose hole 20a, does not interfere the inclination of the holder 20.

Please replace the paragraph beginning on page 6, line 6 with the following amended paragraph

As shown in Fig. 2A, the leaf spring 24 is formed into a ring-shape, and it covers a space between the outer edge of the holder 20 and an inner edge of the accommodating hole 22a. Arc slits 24a are formed in the leaf spring 24 and central-symmetrically arranged with respect to a center of the holder 20. The leaf spring 24 originally ~~have an~~ has an elasticity, and its elasticity is adjusted by forming the arc slits 24a. Since the slits 24a are formed into arc shapes, the holder 20 can be inclined in any direction and the ~~lead spring~~ leaf spring 24 has no directionality.

Please replace the paragraph beginning on page 5, line 7 with the following amended paragraph:

The suspension of the conventional magnetic head suspension assembly too allows the slider 10 to elastically incline in any ~~directions~~— direction. Therefore, by elastically floating and supporting the holder 20 to have the function of the conventional suspension, prescribed tests of the slider can be performed without mounting the slider to be tested onto a real suspension.

Please replace the paragraph beginning on page 8, line 27 with the following amended paragraph:

As described above, in the magnetic head tester of the present embodiment, characteristics of magnetic heads can be tested without mounting the magnetic heads onto suspensions. Note that, there are other ways of giving the suspending function of the suspension of the magnetic head suspension assembly to the magnetic head tester. Other mechanisms for supporting the slider with suspending means will be explained.

Please replace the paragraph beginning on page 9, line 4 with the following amended paragraph:

In a mechanism for supporting the slider 10 shown in Fig. 4, the test sample or the slider 10 is supported by a holder 60 like a flat plate, and the holder 60 is supported by a

holder base 62 and capable of inclining in any ~~directions-~~ direction. The holder 60 detachably and inclinably holds the slider 10 and has functions ~~which is~~ which are similar to those of the holder 20 of the former embodiment. To allow the inclination of the holder 60, a supporting pin 64 is corresponded to a load center of the holder 60 and fixed to a bottom face of the holder 60, and the supporting pin 64 is inclinably supported by a beam 66 fixed to the holder base 62. Symbols 64a and 64b stand for flanges of the supporting pin 64, which are located on the upper and the lower side of the beam 66. A symbol 68 stands for a spring, which is provided between the flange 64b and the beam 66 and which always biases the holder 60 upward. The supporting pin 64 is pierced through a through-hole 66a of the beam 66. By loosely inserting the supporting pin 64 through the through-hole 66a, whose inner diameter is greater than an outer diameter of the supporting pin 64, and elasticity of the spring 68, the supporting pin 64 or the holder 60 can be inclined, with respect to the beam 66, in any ~~directions-~~ direction.

Please replace the paragraph beginning on page 9, line 22 with the following amended paragraph:

In the present embodiment, the holder 60 is supported by the supporting pin 64 only at a point. Therefore, the load working to working on the holder 60 concentrates to the point when the slider 10 is set in the holder 60 to execute the tests, a weight can be vertically applied to the surface of the medium without reference to postures of the slider 10. The slider

10 is floated by rotation of the medium, and actions of the slider 10 ~~is influenced by are~~
influenced by the mass of the holder 60. To solve this disadvantage, the influence on actions
of the slider 10 can be reduced by reducing the mass of the holder 60 (e.g., 50 mg or less). Of
course, the elasticity of the spring 68 is designed to have suspending functions equal to those
of the suspension on which the slider 10 is mounted.

Please replace the paragraph beginning on page 12, line 2 with the following
amended paragraph:

A concave section 76 having an inner spherical face 76a, which opposes to a
spherical face of the hemispheric base 80, is formed in the holder base 75. Supporting pins 64
are attached to the holder base 75 and headed toward a center of the hemispheric base 80, and
they are biased, by springs 68, to project their front ends from the inner spherical face 76a.
The supporting pins 64 are central-symmetrically arranged with respect to a center of the
concave section 76, so that a resultant force of elastic forces caused by elasticity of the
springs 68 of the supporting pins 64 is vertically applied to the surface of the medium. Front
ends of the supporting pins 64 are rounded and capable of sliding on the spherical face of the
hemispheric base 80. With this structure, the slider 10 supported by the holder 60 can be
inclined in any ~~directions, direction~~, so that suspending functions equal to those of the real
suspension, on which the slider is mounted, can be gained.

Please replace the paragraph beginning on page 12, line 15 with the following amended paragraph:

In Fig. 11, air holes 78 are formed in the holder base 75 instead of the supporting pins 64 of the embodiment shown in Fig. 10, and air is jetted outward from the air holes 78 so as to inclinably support the hemispheric base 80 in the concave section 76. In the present embodiment, axial lines of the air holes 78 are headed toward the center of the hemispheric base 80, and the air holes 78 are central-symmetrically arranged. With this structure, the hemispheric base 80 can be inclined in any ~~directions~~, direction, and a resultant force of jetted air is vertically applied to the surface of the medium. By adjusting the pressure of the air jetted out from the air holes 78, a suspending force supporting the slider 10 can be adjusted, and the tests can be executed with adjusting the air pressure according to conditions of products.